

CLAIMS

1. A spherical absorption pigment, which comprises:
 - a component A comprising spherical particles having a particle size of 1 – 100 nm which are coated with one or more color-providing layers and, over the color-providing layer(s), a layer of SiO₂and
 - a component B comprising spherical particles having a particle size of 0.5 – 50 μm which are coated with one or more color-providing layers and, over the color-providing layer(s), a layer of SiO₂.
2. A spherical absorption pigment according to Claim 1, wherein the spherical particles for at least one of component A and component B are SiO₂ beads, TiO₂ beads, nanoscale metal particles, polymer beads, glass beads and/or hollow glass beads.
3. A spherical absorption pigments according to Claim 1, wherein the spherical particles for both component A and component B are SiO₂ beads.
4. A spherical absorption pigment according to Claim 1, wherein at least one color-providing layer for at least one of component A and component B is a layer of a metal oxide, metal sulfide, metal nitride, metal oxynitride, metal or mixture thereof.
5. A spherical absorption pigment according to Claim 4, wherein at least one color-providing layer is TiO₂, ZrO₂, SnO₂, ZnO, BiOCl, Ce₂O₃, FeO(OH), Fe₂O₃, Fe₃O₄,

TiFe₂O₅, Cr₂O₃, Fe₄[Fe(CN)₆]₃, a titanium sub-oxide, a titanium oxynitride, pseudobrookite, titanium nitride, CoO, Co₃O₄, VO₂, V₂O₃, NiO, CoAl₂O₄, BiVO₄, Ce₂S₃, MoS₂, Al, Fe, Cr, As, Au, Pt, Pd or mixture thereof.

6. A spherical absorption pigment according to Claim 1, wherein component A and/or component B comprises one, two, three, four, five or seven color-providing layers.

7. A spherical absorption pigment according to Claim 4, wherein component A and/or component B comprises one, two, three, four, five or seven color-providing layers.

8. A spherical absorption pigment according to Claim 5, wherein component A and/or component B comprises one, two, three, four, five or seven color-providing layers.

9. A spherical absorption pigment according to Claim 6, wherein component A and/or component B comprises one, two or three color-providing layers.

10. A spherical absorption pigment according to Claim 1, wherein the color-providing layer(s) in component A and component B are each one or more metal-oxide layers.

11. A spherical absorption pigment according to Claim 10, wherein the metal oxide layers are TiO₂, Fe₂O₃, Fe₃O₄, FeO(OH), an iron titanate, pseudobrookite or a mixture thereof.

12. A spherical absorption pigment of claim 1, wherein color-providing layer(s) for component A and component B are the same.

13. A spherical absorption pigment according to Claim 1, wherein component A and component B are mixed in a weight ratio of from 1:10 to 10:1.

14. A spherical absorption pigment according to Claim 1, wherein at least one of component A and component B additionally has an outer protective layer in order to increase the light, temperature and/or weather stability.

15. A process for the preparation of a spherical absorption pigment according to Claim 1, which comprises mixing the spherical particles of components A and B with one another in suspension, and coating the spherical particles by wet-chemical processes by hydrolytic decomposition of metal salts in aqueous and/or organic solvents and/or by means of CVD and/or PVD processes or by reduction from an aqueous solution of metal salts.

16. A paint, coating, printing ink, security printing ink, plastic, ceramic material, glass, tracer, or cosmetic composition comprising a spherical absorption pigment of claim 1.

17. A cosmetic composition comprising a spherical absorption pigment of claim 1.

18. A dry pigment composition comprising a spherical absorption pigment of claim 1.